

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT

Applicants: JESSE J. WILLIAMS AND ERIC J. HANSEN

For: EXTRACTION CLEANING WITH OXIDIZING AGENT

Serial No.: 09/589,973

Examiner: Derrick G. Hamlin

Filed: 06/08/00

Art Unit: 1744

Docket: 71189-1300

DECLARATION UNDER 37 C.F.R. § 1.132 OF KELLI CAIN

Commissioner for Patents
Washington, DC 20231

Sir:

Kelli Cain hereby declares that:

1. I am a citizen of the United States and a resident of Grand Rapids, Michigan.
2. I am employed in the BISSELL Marketing Department of BISSELL Homecare, Inc. of Grand Rapids, MI and have been so employed for four years. As part of my responsibilities, I analyze market research for BISSELL Homecare, Inc.
3. I graduated from Michigan State University in 1991 with a Bachelor of Science degree in Multidisciplinary Studies. I have been employed as a product marketer between the years of 1995 and 1999 at Amway Corporation in Ada, Michigan and as a Product Category Manager for Chemical Marketing at BISSELL Homecare, Inc. from 1999 to the present.
4. BISSELL Homecare Inc. is a manufacturer and marketer of floor care equipment and cleaning products in the United States and in foreign countries. Among BISSELL's floor care equipment are extraction cleaning machines also known as deep cleaning machines. Among BISSELL's cleaning products are detergent cleaning compositions for extraction cleaning machines.
5. In April 2000, BISSELL Homecare began selling an oxidizing composition under the mark BISSELL BOOSTER for use in its extraction cleaning machines. The instructions on

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the label for the BISSELL BOOSTER oxidizing composition container has the following instructions:

1. Add Booster and formula to any brand upright or canister deep cleaner.
2. Use your deep cleaner on carpets and washable upholstery just as you normally do.
3. See improved performance.

The BISSELL BOOSTER oxidizing composition is illustrated graphically in figure 1 inset herewith.



Figure 1.

7. Although BISSELL Homecare spends a considerable amount of money in advertising its extraction cleaning machines, it has done relatively little advertising for the BISSELL BOOSTER oxidizing composition. The advertising expenditures for the BISSELL BOOSTER oxidizing compositions have been less than \$54,000 total for the years 2001 and 2002.

8. Shipments of the BISSELL BOOSTER oxidizing composition for the year 2001 were at least \$235,000 and shipments for the BISSELL BOOSTER oxidizing composition in 2002 were at least \$185,000.

9. Although BISSELL Homecare enjoyed some relatively early success in selling the BISSELL BOOSTER oxidizing composition, it was later curtailed because of the introduction of

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new commercial bleaching composition that were advertised for use in extraction cleaning machines as well as for other uses. These other commercial bleaching compositions were far more highly advertised than the BISSELL BOOSTER oxidizing composition and accordingly were given shelf space in mass merchandising outlets whereas the BISSELL BOOSTER oxidizing composition was not given shelf space in the mass merchandisers in view of the commercial bleaching compositions that were advertised for other purposes.

10. Prior to August 2000, I am not aware of the advertising of any oxidizing composition for use in extraction carpet cleaning machines.

11. In September 2000, Orange Glow International introduced a powdered oxygen bleach in the United States under the mark OXICLEAN. It was highly advertised and promoted as laundry bleach but also advertised for use in cleaning carpets and in commercial extraction cleaning machine. Attached hereto is Exhibit A is a copy of a website that advertises OXICLEAN for, among other purposes, cleaning carpets and upholstery.

12. OXICLEAN bleach is believed to contain 50% to 60% active oxygen bleach (sodium procarbonate) as shown in Exhibit B which is a copy of a Solvay Interlox web page that discusses the use of sodium percarbonate oxygen bleaches. See pages 3 and 4 for a discussion of OXICLEAN oxygen bleach.

13. BISSELL Homecare has collected data related to the sale of OXICLEAN bleach and its competitors for the years ending February 2002 and February 2003. The data was collected by ACNielsen Cos. and shows sales of total mass channels plus grocery retailers such as Meijer, Inc. The sales at Wal-Mart are estimated from data collected in a nationally represented sampling of consumers with a sample size of about 125,000 households. According to this information, the sales of OXICLEAN bleach composition for the 52 weeks ending February 2002 was \$50.7 million and the sales of OXICLEAN in these channels of trade for the 52 weeks ending February 2003 was \$103.1 million.

14. OXICLEAN is believed to be the best known of any of the brands of mass marketed oxygen bleaching products. It is reported to be sold on television infomercials, through

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catalogs, magazines, the internet and in stores like Walgreen, Wal-Mart and other national chains. See Exhibit B.

15. In 2002, other companies introduced to the market powdered oxygen bleach very similar to the OXICLEAN powdered oxygen bleach. See Exhibit B.

16. Sales of all powdered oxygen bleach products in the United States through food and mass merchandisers and Wal-Mart stores for the 52 weeks ending February 2002 was \$50.7 million and sales of powdered oxygen bleach through the same channels for the 52 week period ending February 2003 was \$139 million.

17. I believe that this data shows a dramatic commercial success for the sale of powdered oxygen bleaches.

18. BISSELL homecare commissioned a survey by Strategic Marketing and Research, Inc. of the uses of OXICLEAN by a representative of sampling of households. The results of this survey are attached hereto as Exhibit C and are entitled "Chemical Attitude and Usage Tracking Study." The study was conducted in December 2002 among women, head of households, 25 years of age and older according to the following samples: 500 among general population samples; 200 among BISSELL upright deep cleaner owner; 100 among BISSELL compact deep cleaner owners.

19. The survey participants have primary responsibility for purchasing household cleaning items.

20. According to the survey, 42% of OXICLEAN users report that they used OXICLEAN bleaching composition as an additive in carpet deep cleaning machines. We interpret this data as the addition of the oxygen bleach to the carpet cleaning solution.

21. Based on my background and education I believe that this data shows commercial success of the use of powdered bleach, i.e., an oxidizing agent with a cleaning solution, prior to dispensing of the cleaning solution onto an upholstery or carpet surface wherein the cleaning solution is recovered from the surface with suction.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made in information and belief are believed to be true; and further that these statements were made with the knowledge that willful thought statements in the like so made are punishable by fine or imprisonment, or both, under Section 101 of Title 18 of the United States code and at such willful thought statements may jeopardize the validity of the application or any patent issuing thereon.

Dated: 4/29/03By Kelli Cain

Kelli Cain

G0091616

**Exhibit A - DECLARATION
UNDER 37 C.F.R. § 1.132 OF
KELLI CAIN**



- Sports & Fitness
- Health & Beauty
- Housewares & Cleaning
- Toys & Novelties
- Gift Ideas
- Cooking & Kitchen
- Gadgets
- Miscellaneous

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OxiClean



What is oxiclean?

Oxiclean is a high energy stain remover that uses the power of oxygen to clean and deodorize. It cleans and whitens like bleach, but is completely safe for colors and whites--tough on stains, but gentle on your fabrics. Oxiclean comes in concentrated crystal form and mixes with water to release its cleaning strength. After eliminating stains, oxiclean breaks down into harmless water, oxygen and soda ash and has NO ODOR--it is completely biodegradable and safe for use around your children, pets and in confined or poorly ventilated areas.

How can I use OXI-CLEAN?

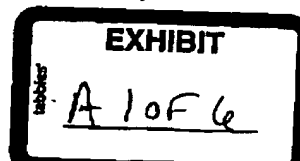
Oxi-Clean works best on organic stains and dirt like:

- Food Stains
- Mold and Mildew
- Juice Stains
- Coffee
- Pet Stains
- Blood
- Perspiration

Oxi-Clean is perfect for cleaning:

- **Carpets and Upholstery** (food stains, wine, coffee, juice, pet stains, spills)
- **Laundry** (works like bleach but safe!)
- **Tile & Grout** (mold and mildew stains)
- **Jewelry** (great for ornate, hard-to-clean items)
- **Outdoor Furniture** (weather stains)
- **Shower Curtains** (soap scum and mildew)

<http://www.youcansave.com/oxiclean.html>



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- **Tennis Shoes** (dirt and grime)
- **All-Weather Carpet** (mold, mildew and pet stains)
- **Dentures** (YES! Cleans and whitens!)
- **Fire Places** (smoke buildup)
- **Kitchen Floors** (dirt, grime and mold)
- **Concrete and Masonry** (mold and weather stains)
- **Vinyl and Aluminum Siding** (dirt, grime, mold, mildew, weather stains)
- **Wooden Decks** (mold and mildew)
- **Dishwashers, Disposals and Drains** (cleans and deodorizes)
- **Trash Cans** (dirt and grime)
- **Mattresses** (mold, mildew, urine stains)
- **Boats** (cleans fiberglass and teak mold, mildew stains)
- and **HUNDREDS** more!

How long will OXI-CLEAN last?

One 2.5 lb. tub of Oxi Clean:

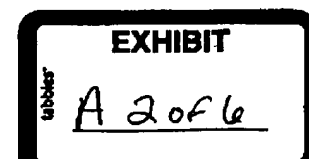
- makes 90 gallons of cleaning solution **OR**
- makes 500 bottles of spot remover **OR**
- cleans 90 loads of laundry!!!

REMEMBER:

Oxi-Clean is a super-powered organic stain remover, but it is completely **SAFE!** Oxi Clean is made from natural ingredients. It mixes with ordinary water and uses the tremendous cleaning power of oxygen to remove stains. It is truly "Mother Nature's way of cleaning."

Oxi-Clean contains no toxic chemicals, cleaning solvents, or

<http://www.youcansave.com/oxiclean.html>



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harmful abrasives. When it is through with the job, it breaks down into water, oxygen and harmless soda ash. OxiClean won't irritate the skin or give off toxic fumes--It has no odor! Safe around children, pets, food, plants, expectant mothers, and the environment.

Product FAQ's

Testimonials

Availability: Usually ships in 5-7 Business Days.

Oxi Clean 1lb Pound Jar SJ-OX1

Compare At: \$9.95 Our Price: **\$5.95**

Add To Shopping Cart

OxiClean 2.5lb Pound Jar SJ-OX2

Compare At: \$31.90 Our Price: **\$9.95**

Add To Shopping Cart

OxiClean 6 Pound Jar SJ-OX16 \$14.95

Add To Shopping Cart

OxiClean 9lb Pound Jar SJ-OX9 \$21.95

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OxiClean Club Save time with the OxiClean Club. Join today, and we'll ship you a new OxiClean 1 lb. jar the first of every month. Billing and shipping will occur automatically. Cancel at any time.

OxiClean Club ZZZ-OX1

OxiClean Club Member Price: **\$5.95**

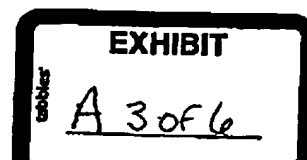
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Frequently Asked Questions About Oxiclean

How does oxiclean work?

Oxiclean is a powerful oxygen based alkaline cleaner that attacks the toughest organic dirt including mildew, blood, pet messes, mold, wine, juice, baby formula and much more. After removing your stains, Oxiclean will break down into harmless oxygen and sodium carbonate. Oxiclean works over time, and some stains will require several treatments for best results. Oxiclean has no odor so you clean without the harmful fumes. For the most effective stain removal, follow the mixing instructions on this instruction sheet using the lightest solution suggestion first and increase the cleaning solution as needed. Always follow manufacturer's specifications and test for colorfastness first by applying Oxiclean in an inconspicuous area and allowing it to dry. Do not leave solution in a sealed container as it will continue to give off oxygen and the container may leak. Oxiclean will remain active for up to six hours. If you have completed your cleaning for the day and have leftover Oxiclean, empty unused cleaner into the garbage disposal or toilet to clean and deodorize these areas. Oxiclean will be most effective when mixed with warm to hot water. Stir or shake the solution until all crystals are dissolved. Do not use boiling water. Do not use Oxiclean on wool or silk.

Once I receive my oxiclean, how can I start using it? What can I do with it?

For general cleaning:

Use a clean spray or squirt bottle. Mix 1/8 of a scoop with 1 pint (2 cups) of warm to hot water. Mix or shake thoroughly. Product will remain active for six hours.

For an extra strong solution:

Mix 1 scoop (2 tablespoons) with 1 pint of warm to hot water. Mix or shake thoroughly. Product will remain active for six hours.

For a soaking solution:

Mix 1-5 scoops of Oxiclean per gallon of hot water.

For making a paste:

Use one scoop of Oxiclean and add just enough drops of water to form a paste.

How to clean carpet, carpet padding, couches, and upholstery?

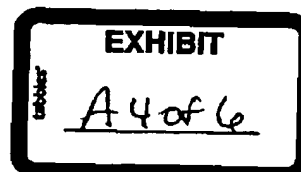
To de-stain and deodorize your carpet, start by mixing a general cleaning solution. Remove as much of the dirt or liquid as possible. Squirt Oxiclean on spot and let stand 5-10 minutes. Rinse thoroughly by pouring fresh water over spot, soak up with a clean cloth or towel and vacuum thoroughly when completely dry. Always test for colorfastness before applying Oxiclean.

How to clean curtains, sheers, wedding dresses, and tennis shoes?

To de-stain and deodorize curtains/sheers that are yellow, dingy or smoke-stained, mix a soaking solution and allow items to soak 30-60 minutes. Rinse thoroughly with fresh water and let dry. For wedding dresses and tennis shoes, use warm water and begin with a light solution of Oxiclean (1-2 scoops per gallon). Soak 10-20 minutes, rinse thoroughly with fresh water, and let dry.

How to clean laundry?

<http://www.youcansave.com/oxiclean-faq.html>



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Add one scoop of OxiClean to each load of laundry in addition to your regular detergent. OxiClean will boost your laundry detergent's cleaning power and is safe on most fabrics including jeans and colors. Do Not Use On Wool Or Silk. For extra tough laundry stains, fill the washing machine with hot water, laundry detergent and OxiClean (1-4 scoops) and turn machine off. Allow to soak 30-minutes up to overnight. Run machine as usual after soaking.

How to use oxiclean with carpet cleaning machines?

Add 1 scoop of OxiClean per gallon of warm water. Use OxiClean with a carpet cleaning solution to increase the cleaning power

How to clean ice chests and garbage cans?

Mix a soaking solution directly in the ice chest or garbage can, allow to stand for 1 hour up to overnight. Rinse thoroughly

How to clean mops and sponges?

Mix a general cleaning solution in a bucket or sink, place mop or sponge into bucket and let stand for 30-60 minutes. Rinse thoroughly.

How to clean tile and grout?

For light maintenance on porcelain tubs, tiles, sinks and toilets, mix a general cleaning solution. Spray on, scrub lightly and rinse thoroughly.

For extra tough mold and mildew, make OxiClean into a paste and apply. Let stand for 1 hour up to overnight, scrub and rinse thoroughly.

How to clean jewelry and dentures?

For jewelry, use 1/8 of a scoop of OxiClean in 4 cups of water and soak for 5-10 minutes. Rinse thoroughly and dry with a soft cloth. To de-stain and deodorize dentures, soak in a general cleaning solution for 1 hour up to overnight, rinse thoroughly.

How to clean cutting boards, kitchen countertops, and tupperware?

To clean and deodorize your whole kitchen, use a general cleaning solution and apply with a soft cloth, squirt bottle or sprayer, let stand 5-10 minutes and rinse. For extra strong stains, soak item with an extra strong solution for 15-20 minutes, rinse thoroughly.

How to destain coffee pots?

To de-stain your coffee pot add one scoop of OxiClean directly into a coffee pot of hot water, soak 10-15 minutes and rinse thoroughly. To remove build up inside the coffee maker, mix a general cleaning solution into squirt bottle, allow solution to cool completely, then pour into coffee maker. Turn on coffee maker and allow solution to run through machine. Rinse by running cold, fresh water through the cycle.

How to clean refrigerators?

To eliminate mold, mildew and other organic stains, mix a general cleaning solution in a squirt bottle and apply with a soft cloth, let stand 10-20 minutes, wipe and rinse thoroughly.

How to clean all weather carpeting, fencing, concrete, siding, wood decks, and stucco?

To remove weathered stains from wood decking, fencing, siding, concrete, and stucco, use a general cleaning solution and apply with a clean lawn sprayer. Let stand 10-30 minutes, scrub if necessary and rinse thoroughly. Or mix a general cleaning solution in a bucket and apply with a broom or brush, then scrub and rinse thoroughly.



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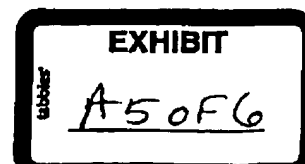
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ndow awnings, patio umbrellas, wicker furniture, re?

red stains and dirt from your outdoor patio furniture, ning solution and apply with a lawn sprayer, or mix et and apply with a scrub brush or broom. Let stand nse thoroughly.

<http://www.youcansave.com/oxiclean-faq.html>



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How to eliminate and deodorize pet stains and urine?

Oxiclean will clean and deodorize carpets, carpet padding and upholstery stained with pet messes. Always test for colorfastness first. Remove dirt or soak up liquid thoroughly before applying Oxiclean. Mix a general cleaning solution of Oxiclean in the squirt bottle, apply to affected area and let stand for 5-10 minutes. Rinse thoroughly with fresh water and soak up with a clean cloth or towel. Vacuum area when completely dry.

How to clean fireplaces and bricks?

Use the general cleaning solution and apply to fireplace or bricks with a scrub brush or broom, allow to stand 10-20 minutes and rinse thoroughly with fresh water. Scrub before rinsing if necessary.

How to remove water damage and mildew with oxiclean?

To remove mold and mildew prior to painting or to clean up water damage, mix a soaking solution, apply to surface, and scrub with a brush or sponge. Let stand 20-30 minutes and rinse thoroughly

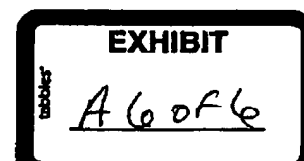
How to clean shower curtains with oxiclean?

To remove mold and mildew from shower curtains, mix a soaking solution, let shower curtain soak for 30-60 minutes, scrub if necessary and rinse thoroughly.

[Return to the main Oxiclean page](#)

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**Exhibit B - DECLARATION
UNDER 37 C.F.R. § 1.132 OF
KELLI CAIN**

SOLVAY INTEROX

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FB® Sodium Percarbonate

A free-flowing white powder made with hydrogen peroxide and sodium carbonate, provides high alkalinity to boost the bleaching power of peroxide. Solvay Interox's unique fluidized-bed manufacturing process results in a low-moisture, dust-free product with uniform size granules for ease in handling. FB® Sodium Percarbonate is certified as Kosher. Applications include use in:



- heavy-duty laundry detergents
- all-fabric bleaches
- wood deck bleaches
- textile bleaches
- vat dye oxidation
- carpet cleaners

It is used in a number of general cleaning products in the institutional and industrial marketplace. The product is also used in personal care formulations, denture cleaners, and certain food bleaching applications.

Access our Resource Library of associated downloadable files in the Adobe Acrobat® format.

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EXHIBIT

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B-107

POWDERED OXYGEN BLEACH PRODUCTS

OXICLEAN , OXY-BOOST, CLOROX OXYGEN ACTION, STAIN SOLVER, OXYGEN8, WHITE WAVE, AJAX, DECK AND SIDING BRIGHTENER, ETC.

AN OVERVIEW.....

(Updated 8/23/02)

Introduction

By now many of us are familiar with powdered oxygen bleaching products seen in stores or advertised on television. They range from "Tide with Bleach" to "OxiClean" to "Ajax Oxygen Bleach Powder Cleanser" to "Wolmans Deck and Siding Brightener". While these unique cleaners and stain removers have been around for years it is only recently that they have come into prominence in the consumer market. This page attempts to look at these products and give you an overview as to what they are, how they work and how they are used.

What are Oxygen Bleaches?

Oxygen bleaches are materials that release oxygen for cleaning and bleaching of stains and dirt upon addition to water. There are three types of oxygen bleaches sold in the consumer market, hydrogen peroxide, sodium percarbonate and sodium perborate. While hydrogen peroxide is a liquid, sodium percarbonate and sodium perborate are powders. Sodium percarbonate is used in deck, carpet, household and laundry cleaning products. Sodium perborate is also a powder and is used mostly in automatic dishwashing and laundry products as a hot water bleaching agent. While sodium perborate has the highest solubility in water, sodium perborate is more storage stable in detergent formulations.

Powdered bleaches are made by treating natural soda ash or natural borax with hydrogen peroxide. These materials can absorb the oxygen while remaining free flowing solids. Upon dissolving in water, they release the oxygen. (One popular infomercial seen on television claims that their oxygen bleach takes the oxygen right out of the air which is totally false!!) Pure sodium percarbonate contains about 13-14% oxygen and sodium perborate contains about 10-15% oxygen. They are currently being manufactured in the United States, Korea and China. While Asian bleaches are generally lower in cost, the US produced bleaches are the most consistent in composition and performance.

Advantages of Powdered Oxygen Bleach

Probably the best advantage of an oxygen bleach is that you can get rid of stubborn dirt and organic stains without having to use toxic and hazardous materials like chlorine bleach. Also they can be used on carpet, upholstery and even the most delicate linens (except for some types of wool and silk) without harming the fabric. Unlike many products that are sold as environmentally friendly cleaners that are not that effective, oxygen bleaches really do work and for some stains even do a better job than traditional bleaches or cleaners.

Other Advantages:

- Better long term shelf stability than liquid hydrogen peroxide products
- Acts as a disinfectant on both bacteria and viruses likely to be encountered in the home
- Brightens fabrics

<http://oxygenbleach.homestead.com/files/>

EXHIBIT

B-207

- Oxygen bleaches can be mixed or used with other household cleaners
- Non-toxic to animals, plants and humans.
- Very environmentally friendly as they break down into natural soda ash and/or borax after the oxygen is released.

Disadvantages of Powdered Oxygen Bleaches

Powdered oxygen bleaches do have some minor drawbacks you should be aware of:

- Oxygen bleaching products can cost more to use than standard cleaning products
- They take time to dissolve in water
- While very effective, oxygen bleaches can take longer to work
- They are not suited for some finer grades of silk or wool

A Word On Liquid Oxygen Bleaches

As mentioned previously, another way to purchase oxygen bleach is as a water solution of hydrogen peroxide. It releases oxygen which does the cleaning and bleaching leaving only water as the byproduct. Hydrogen peroxide can be purchased in many dilutions. Many consumers use 3% hydrogen peroxide for general household purposes. Another popular dilution is the 35% food grade which doesn't contain chemical stabilizers as the 3% solution does. However this does shorten the shelf stability.

While the purchase price of hydrogen peroxide products are cheaper than the powdered versions you must consider that much of the product is water. On an oxygen equivalency basis the costs are similar. While hydrogen peroxide solutions have the advantage over powdered products of being sold ready to use, powdered bleaches are easier to handle, have better storage stability and do not need any added chemicals to enhance stability.

Differences In Oxygen Bleaching Products

There are four categories of powdered oxygen bleach products being sold in the consumer market. They are:

Ultra-Concentrated Oxygen Bleaches

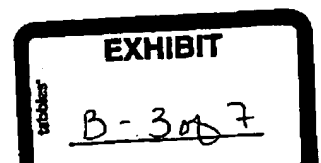
Ultra-concentrated bleaches generally contain from 80-100% oxygen bleach (usually sodium percarbonate). While the most expensive to purchase they are also the most effective products for bleaching and cleaning. Ultra-concentrated products are more versatile in the type and severity of jobs they can tackle. Simply, the more oxygen available for cleaning the better.

Concentrated Oxygen Bleaches

Products sold in this classification generally contain 40-70% sodium percarbonate. Infomercial sold oxygen bleaches which used to be sold as ultra-concentrated are now sold under this classification. While now more reasonably priced they do not work as well on really tough cleaning jobs where a more concentrated product is needed.

Oxygen bleaches with additives and other cleaning agents

<http://oxygenbleach.homestead.com/files/>



One approach that some manufacturers have made is to add surfactants, additives, fillers, detergent builders and other cleaning agents. These additives are used to maintain and assist the oxygen bleaches cleaning ability but lower the overall cost of use. This is especially the case for products targeted for laundry use. Generally these products contain 20-40% bleach.

Cleaning products that contain oxygen bleach as an ingredient

The vast majority of oxygen bleaching products fall into this category. They include laundry and dishwashing detergents, toilet bowl cleaners, cleansers, deck and siding cleaners, concrete cleaners, carpet cleaners, etc. Generally these products contain 25% or less oxygen bleach.

Comparisons Of Companies Marketing Oxygen Bleaching Products

Below are comments comparing some of the better known companies marketing oxygen bleaches:

Ultra-Concentrated Oxygen Bleaches

OxyBoost (TM) - Marketed by Natural Choices. When you go to their web site it is obvious that their goal with visitors is to first help them solve a cleaning problem and not necessarily sell them a product. That is of a real benefit when you have a cleaning problem and want to get it solved and not have to wade through a bunch of marketing mumbo jumbo. They have stain removal discussion forums, links to web sites with vast cleaning and stain removal expertise and even a search engine to assist you in finding help for your particular stain or cleaning problem. Their oxygen bleach, OxyBoost, is of the highest quality and is at least 80-90% sodium percarbonate. It is very reasonably priced and they have probably the best use knowledge and customer service support of any company marketing alternative cleaning products. OxyBoost is sold in 1, 2.5, 6, 20, 45 and 100 pound quantities.

Natural Choices also carries several other sodium percarbonate based products including dishwashing, toilet bowl cleaner, kitchen and bathroom cleanser and laundry detergent (See below). They have the most complete line of oxygen bleach products available anywhere and are probably the most knowledgeable on their use. They have several kits available that combine their oxygen bleach products and some of their other cleaners.

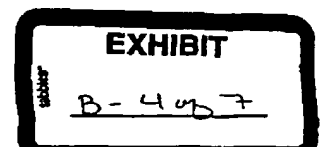
Stain Solver (TM) - Marketed by Ask The Builder (Tim Carter). Stain Solver has been sold for several years as part of Tim's "Ask The Builder" home improvement oriented web site. He has an excellent illustrated page on how to clean a wood deck as part of his site. Otherwise this site just contains basic information on Stain Solver and its use. This product is very high in sodium percarbonate content (in excess of 90%). It is sold in 2, 4, 6, 8, and 10 pound quantities and is higher priced than Natural Choice's Oxy-Boost.

Shout Oxy Power (TM) - Marketed by SC Johnson. The newest entry in the consumer oxygen bleach market. This is a premium product that contains at least 75% sodium percarbonate that should out perform Oxiclean, Clorox Oxygen Action or All Oxi-active. Unless the other products change we would predict that Oxy Power should win out in the 'name brand' oxygen bleach wars based upon its price and level of active ingredients.

Concentrated Oxygen Bleaches

Oxiclean (TM) - Marketed by OrangeGlo International. Oxiclean is the best known of any of the brands and is king of the mass marketed oxygen bleaching products. It is sold on TV infomercials, through catalogs, magazines, distributors, the internet and in stores like Walgreens, Walmart and other national chains. Oxiclean is sold in 1, 2.5, 6 and 9 pound quantities or as part of several kits with some of OrangeGlo's limonene based cleaners and polishes. Oxiclean is a good product but is sometimes oversold considering what is and its lower levels of active oxygen bleach. OrangeGlo has been criticized for putting much of its effort in marketing Oxiclean and not much effort in assisting

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customers. Oxiclean contains about 50-60% active oxygen bleach (Sodium percarbonate).

Clorox Oxygen Action (TM) - Newly marketed by The Clorox Corporation. This product is basically a carbon copy of Oxiclean from the percentage of sodium percarbonate it contains (50-60%) to the style of packaging, its lettering as well as product pricing. Clorox is obviously going directly after Oxiclean business and it will be interesting to see who will come out on top. The consumer should win in getting a low cost product but like Oxiclean the efficacy is still lacking in comparison to higher quality oxygen bleach products.

All Oxi-active (TM) - Marketed by Lever Brothers. Another new entry into the oxygen bleach stain removal product offerings. It is a sodium perborate based product. While sodium perborate is excellent for cleaning and stain removal in hot water its very limited solubility in lukewarm and cold water does limit the scope of its use. Perborate compounds are also known to contain traces of arsenic which is why they are being outlawed in Europe. With ever tightening water quality restrictions on arsenic levels being put in place in the US as well it would seem that this product does not have a good future in its current state.

Oxygen8 (TM) - A rapidly fading addition to the concentrated oxygen bleach consumer products. It is sold by Medallion Products through QVC. Initially Oxygen8 was marketed on television and in catalogs to compete directly with Oxiclean but at a lower price. Like Oxiclean it is only 50-60% oxygen bleach. You can buy it online at the QVC web site (4-6 weeks delivery!!) but there are only a few companies or distributors still selling it. Their customer service response is poor at best and there is virtually no technical service available.

-Oxygen bleaches with additives and other cleaning agents

Color Safe Powdered Bleach - Marketed by The Clean Environment Company. A sodium perborate based product (29%) of which they claim is the highest oxygen content available which is not true as concentrated percarbonate products are highest. Good Price.

Natural Oxygen Bleach - Marketed by Lifekind Products. A percarbonate based product that also contains fabric and water conditioners, detergent boosters, stain, mildew and corrosion additives. Also contains sodium sulfate which is a filler and does no cleaning. I am not sure that an oxygen bleaching product needs to have all these additives to be effective when its main use is to get rid of organic stains and dirt. Good price.

Non-Chlorine Bleach Powder - Marketed by Bio Pac. Contains sodium percarbonate, soda carbonate (soda ash). It also contains sodium chloride (salt) which is just a filler and does nothing for cleaning.

Oxygen Bleach - Marketed by Bi-O-Kleen. Exactly the same product as Lifekind's natural Oxygen Bleach described above.

White Wave - Marketed by Organics. Contains other additives to make it more suitable for laundry use. Very good for people with skin sensitivities. Probably the best buy in this category.

-Cleaning products that contain oxygen bleach an ingredient

There are really too many to review so I have listed products and companies of some of the better known brands
Ajax - Oxygen Bleach Powder Cleanser (Beware!!! Even though this product is sold as an oxygen bleach cleanser we could not find any oxygen bleach materials listed on the product label or MSDS)

Bio-Kleen - Automatic Dish Powder (Sodium Percarbonate)

Bio Pac - Automatic Dish Powder (Sodium Percarbonate but also contains phosphates!!!)

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Country Save - Non-Chlorine Bleach (Sodium Perborate)

Ecover - Non-Chlorine Bleach (Hydrogen Peroxide)

Heathers Naturals - Oxygen Bleach Cleanser (Sodium Percarbonate)

Natural Choices - Oxy-Prime Powdered Laundry Detergent (Sodium Percarbonate)

Oxy-Dish Automatic Dishwashing Detergent (Sodium Percarbonate)

Oxy-Flush Toilet Bowl Cleanser (Sodium Percarbonate)

Oxy-Scrub Kitchen and Bathroom Cleanser (Sodium Percarbonate)

Oxy-Drain Drain Maintainer (Sodium Percarbonate)

Oxy-Grout Grout Cleaner (Sodium Percarbonate)

Orange Glo International - OxiWash(TM) Laundry Detergent (Sodium Percarbonate)

Seventh Generation - Ultra Non-Chlorine Bleach (Hydrogen Peroxide)

Seventh Generation - Automatic Dishwasher Powder (Sodium Perborate)

Wolman - Deck and Siding Brightener (Sodium Percarbonate)

How To Buy Oxygen Bleaching Products

The first thing to consider is what are your cleaning and stain removal needs? If you have a wide range of problems from laundry, carpeting, upholstery, pets, children, wood decks, etc., then a ultra-concentrated or concentrated bleach product is probably the choice for you as it will give you the best stain removal power and versatility of application.

If you are just concerned with normal laundry use then one of the oxygen bleach detergents or an oxygen bleach with cleaning additives is probably just fine. If needed you can use an oxygen bleach as a presoak or as an additive to your normal detergent.

Take note of what ingredients are used and avoid products with fillers like sodium chloride (salt) and sodium sulfate. Due to their limited solubility bleaches based on perborates cannot provide as high of an available oxygen content as concentrated sodium percarbonate bleaches can.

If you are familiar with oxygen bleaches and how to use them then buying from a vendor with the lowest price and who doesn't provide a lot of support is okay. If you are unfamiliar or don't have much experience with these kinds of products then you are better off buying from a vendor who will provide you good customer support like Natural Choices. If convenience and a name brand is important then you can choose from brands like Oxiclean or Bi-O-Kleen.

Price Comparrison

Internet retail prices shown below are based on One Pound size containers (or calculated from the closest size to 1 pound) for equal comparison. Most companies offer larger sizes at a lower per pound cost.

Ultra-Concentrated Bleaches

Company	Product	Price/Lb*	Bleach Type
Natural Choices	Oxy-Boost	\$5.40	Percarbonate

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Ask The Builder	Stain Solver	\$9.00	Percarbonate
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Concentrated Bleaches

Company	Product	Price/Lb*	Bleach Type
QVC	Oxygen8	\$7.95	Percarbonate
Orange Glo International	Oxiclean	\$5.95	Percarbonate

Bleaches With Other Additives, Fillers and Other Cleaning Agents

Company	Product	Price/Lb*	Bleach Type
Clean Environment Company	Color Safe Powdered Bleach	\$3.00	Perborate
Sodasan	Bleach Additive	\$3.90	Percarbonate
Bi-O-Kleen	Oxygen Bleach Plus	\$3.13	Percarbonate
Morganics	White Wave	\$5.18	Percarbonate
Lifekind	Natural Oxygen Bleach	\$3.98	Percarbonate
Bio Pac	Non-Chloride Bleach Powder	**	Percarbonate

*Internet purchase price. Does not include shipping costs.

** Only bulk pricing available

Future Of Oxygen Bleach Products

With the wide availability of sodium percarbonate and sodium perborate at reasonable prices and the ease at which they can be formulated into a range of effective and safe consumer products, the future for these products is bright. Oxygen based bleach based products will continue to provide consumers with naturally derived safe and effective alternatives to toxic household cleaners. The largest use will continue to be in laundry applications but you will see oxygen based bleaches in other household products such as toilet bowl cleaners, siding cleaners, tile and grout cleaners, carpet cleaners, masonry cleaners and concrete cleaners to name a few.

Due to the availability of lower cost Chinese and Korean made sodium percarbonate costing as little as half the price of domestic produced materials, the pricing of oxygen bleach products will be very favorable to manufacturers. The only question is the quality and consistency of these foreign made materials which has made manufacturers of high quality oxygen bleach products reluctant to use them.

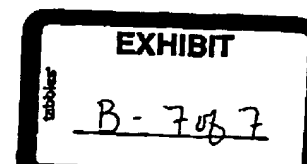
References

Solvay-Interox

(Page last updated 8/23/02)

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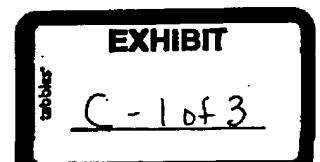


**Exhibit C - DECLARATION
UNDER 37 C.F.R. § 1.132 OF
KELLI CAIN**



Chemical Attitude & Usage Tracking Study

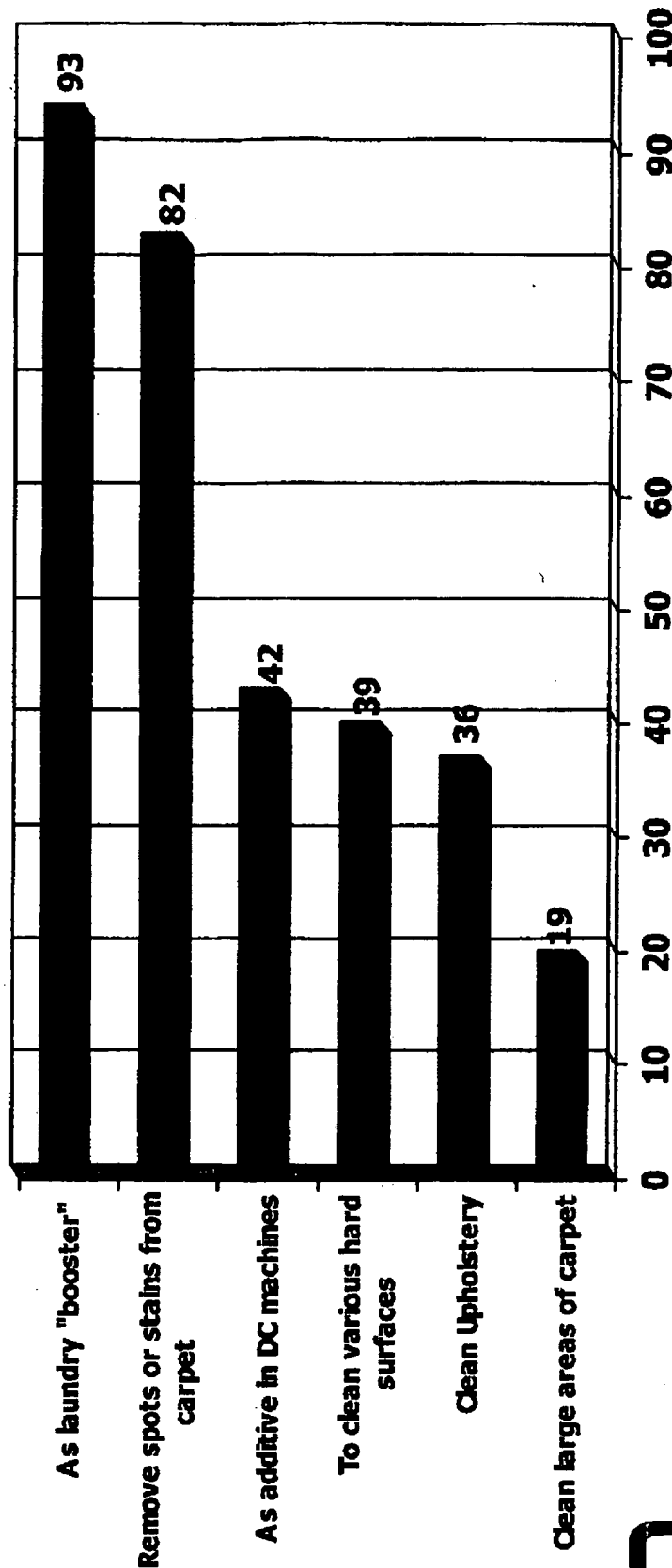
February 2003





Use of OxiClean

- 42% of OxiClean users report that they use it as an additive in Carpet Deep Cleaning Machine.



Source: BISSELL Chemical Awareness & Imagery Study, 2002. Total base of 120 OxiClean users.

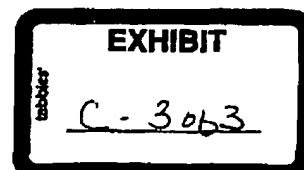
EXHIBIT

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Methodology

- Online study conducted among women, head of households, 25 years of age and older:
 - 500 among General Population Sample
 - 200 among BISSELL upright deep cleaner owners
 - 100 among BISSELL compact deep cleaner owners
- Have primary responsibility for purchasing household cleaning items.
- Study completed in Dec 2002.



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: JESSE J. WILLIAMS AND ERIC J. HANSEN

For: EXTRACTION CLEANING WITH OXIDIZING AGENT

Serial No.: 09/589,973

Examiner: Derrick G. Hamlin

Filed: 06/08/00

Art Unit: 1744

Docket: 71189-1300

DECLARATION UNDER 37 C.F.R. § 1.132 OF JESSE J. WILLIAMS

Commissioner for Patents
Washington, DC 20231

Sir:

FAX RECEIVED
APR 30 2003
GROUP 1700

Jesse J. Williams hereby declares that:

1. I am a citizen of the United States and a resident of Zeeland, Michigan. I am an inventor named in the above-identified U.S. patent application.
2. Since at least April 1993, I have been employed as Manager of Chemical Development at BISSELL Homecare, Inc., the assignee of the above-identified patent application, and its predecessor in interest, BISSELL Inc. (hereinafter collectively referred to as BISSELL).
3. I am named as a joint inventor in the above-identified U.S. Patent Application.
4. BISSELL is in the business of designing, developing, manufacturing and selling floor care products, including carpet extractors and chemical cleaning compositions for use in the carpet extractors. An example of a carpet extractor sold by BISSELL is disclosed in Figs. 1-22 of the above-identified application. BISSELL is a leading supplier of carpet extraction machines in the domestic carpet cleaning market in the United States. BISSELL also manufactures and sells a carpet cleaning solution for use in the BISSELL carpet extractors. All of the BISSELL

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Art Unit: 1744

carpet cleaning solutions have been developed in my department under my supervision at least since April 1993.

5. I am familiar with the BISSELL Booster oxidizing composition sold by BISSELL Homecare for use in extraction cleaning machines. It was developed by BISSELL in my department. The BISSELL Booster oxidizing composition contains a mixture of sodium percarbonate and TAED.

6. I am familiar with the U.S. Patents Nos. 5,576,282 to Miracle et al. (Miracle et al. '282 patent), 5,386,612 to Sham (Sham '612 patent) and 5,555,595 to Ligman (Ligman '595 patent). The Miracle et al. '282 patent discloses a bleach composition comprising a peroxygen source and a bleach booster selected from the group consisting of zwitterionic imines and anionic imine polyions having a net negative charge to increase bleaching effectiveness in lower temperature solutions. The bleach boosters are said to be ideally suited for inclusion into bleaching compositions including those with deterative surfactants and enzymes. The Miracle et al. '282 compositions are said to be useful in laundry additive compositions. All examples in the Miracle et al. '282 patent relate to laundry detergent compositions.

7. The Ligman '595 patent discloses a carpet cleaner which includes an electric heater for heating a cleaning solution in a solution tank that is sprayed onto a floor. The carpet cleaner operates in a manner of a conventional extraction carpet cleaner well known in the carpet cleaning art.

8. The Sham '612 patent discloses a portable steam vacuum cleaner wherein water or cleaning solution is heated in an electric heater to produce steam. An extraction system removes soiled water from a surface to be cleaned. The Sham device is preferably used for generating steam for delivery to a flat surface, such as a window, floor or table to be cleaned. Water or a cleaning solution such as, for example, soapy water can be used in the reservoir of the Sham cleaner.

9. Based on my experience in developing carpet cleaning solutions, it would not be appropriate to use the Miracle et al. '282 bleach boosters in a carpet cleaning solution with a carpet extractor as disclosed in either of the Ligman '595 or Sham '612 patents. The Miracle et

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al. '282 bleach compositions appear to be heavy detergents that are useful in washing machine cycles where there are a number of rinse cycles but do not appear to be satisfactory for carpet cleaning extractors that have virtually no rinse cycles. The detergent is sprayed onto the carpet, is agitated with a brush and is then extracted by suction. There is no rinse cycle as in a washing machine. The detergent must be friable so that the residue can be suctioned from the carpet. The Miracle et al. '282 bleach composition would appear to leave an oily residue on the carpet that would result in an immediate resoiling of the carpet. This result would be highly unsatisfactory to our customers.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated: 4/29/03

By Jesse J. Williams
Jesse J. Williams

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